

IN THE CLAIMS:

1. (Currently amended) An underground sprinkler with a pop-up head, consisting of a corresponding underground casing, and an upper cylindrical part having a first diameter and a lower cylindrical part having a second diameter, closed by a cover fixed to the pop-up sprinkler head coupled to a piston, [[and pop-ups]] said piston is operable as a result of [[due to the effect of the]] water pressure [[pushing said piston]] and displaced proportionally to the water pressure[[, to be recovered by the action of]] against the resilience force of a permanent draw-spring when the [[when the]] water pressure stops, and having respective filtering means, piston guiding and holding means, spray arc and sprinkler head swing control means and means for assembling the sprinkler head, comprising:

a draining and cleaning means for preventing the jamming of [[the sprinkler mechanisms (4)]] a sprinkler body disposed in an intersection of an upper cylindrical part (230) and a lower cylindrical part (231) [[two bodies (230, 231) of the casing (23)]];

a cover-nut (25) positioned on top of a underground body (23) and securing the piston thereto, ~~for adjusting at a quarter turn against said intersection and assembled onto the piston (16),~~ said piston having a smooth tubular cylindrical body, ~~and having a fitting means for fitting a respective an~~

inlet filter (22) is disposed on a lower end underground body  
(23) [[thereof]];

~~a closure and anti particle or impurity return filter~~  
~~(22);~~

~~an upper end of said piston with control means for~~  
~~controlling omega-shaped elements (17) for the spray arc;~~

an omega-shaped element (17) is operably attached to a  
neck (165) of the piston (16) and includes an annular body  
with a pair of divergent branches (171), (172);

a stop (29) made of stainless steel wire having an  
elongate body and is coupled to a lower sector (12) for the  
catch of the lower body (12) of the sprinkler body (4);

a non-detachable stainless steel shaft (3) for assembling  
the lower (12) sector and an upper (11) sector [[body]] of the  
sprinkler (4) body;

[[a jet breaker element (10)]] an adjustable jet breaker  
operably attached to said upper sector (11); and,

a single-piece, plastic, reinforced diffuser blade (7)  
operably attached on said stainless steel shaft without  
counterweights.

2. (Currently amended) An underground sprinkler with a  
pop-up head according to claim 1, wherein the draining and  
cleaning means are [[are]] openings (233, 234 and 235)  
provided on a beveled surface of [[the intersection]] an

intermediate part (232) ~~[[of both bodies (230, 231) of the casing (23)]]~~ and radially arranged relative to one another at 120°.

3. (Currently amended) An underground sprinkler with a pop-up head according to claim 1, wherein the ~~[[special]]~~ cover-nut ~~[[quarter turn fit is a part (25) having a]]~~ includes a cylindrical body (250) ~~[[of]]~~ with a circular plan provided with a superficial rib (251) with bevels (252, 253) on two sides ~~for the application of a special tool for opening and closing,~~ and ~~[[provided with]]~~ further comprising projecting arcuate wedge-shaped teeth (254) on ~~[[the perimetral]]~~ a peripheral edge and each positioned relative to one another ~~and with a slight stepping (256) with the bases for said quarter turn embedding in at least three points at~~ 120°, and ~~[[it is provided with]]~~ further comprising a central passage (255) for the piston (16), and a circumscribed circular housing (259) on the inside for storing a joint (26) having a profile suitable for fitting to said piston (16), and ~~[[another]]~~ a doughnut-shaped housing (258) for a joint for fitting to the ~~[[corresponding body]]~~ lower cylindrical part (230).

4. (Currently amended) An underground sprinkler with a pop-up head according to claim 1, wherein the piston further

comprises ~~an externally smooth, tubular cylindrical body (16)~~  
~~having~~ a widened part (160) with a concave curve seating (162)  
for adapting ~~[[the major]]~~ a base (222) of the purifying  
filter (22) and a smaller diameter neck (165) on an upper end  
thereof and provided with several external vertical grooves or  
ribs (167) for engaging a plurality of teeth on the omega-  
shaped body (1) and thereby ~~the corresponding adaptation of~~  
~~the omega-shaped elements (17-173)~~ controlling the spray arc.

5. (Currently amended) An underground sprinkler with a  
pop-up head according to claim 4, wherein the vertical grooves  
or ribs are ~~are grooves or ribs (167) with an acute triangle~~  
~~profile and they are~~ equidistantly spaced at 60° distributed,  
~~preferably at a 60° spacing.~~

6. (Currently amended) An underground sprinkler with a  
pop-up head according to claim 4, wherein the purifying filter  
for the water inlet further comprises a frusto-conical body  
(22) inverted according to its assembly position, having a  
closed minor base (220) and another upper, open major base  
(222) with a perimetral flap (223) for pressure fitting in  
~~[[the]]~~ a lower ~~[[conditioned]]~~ part (162) of the piston (16).

7. (Currently amended) An underground sprinkler with a  
pop-up head according to claim 6, wherein the minor base of

the filter further comprises a concentric outer rim (221) which is housed and closed in an inner stepped (238) neck (237) of ~~[[the]]~~ an inlet (236) or an intake of the lower body (230) of the casing (23).

8. (Currently amended) An underground sprinkler with a pop-up head according to claim 5, wherein the plurality of teeth for the omega-shaped part are on a inner surface of an annular body positioned, each tooth having a triangular configuration having a first engaging side and a second engaging side positioned at 114° with respect to the first engaging side ~~the omega-shaped elements controlling the spray arc further comprise an annular body (17) projected in two divergent branches (171-172) justifying said omega shape, and which internally, on the annular body (17), have a triangular toothing (170) preferably at 114°, wherein the omega-shaped part rotates~~ ~~[[which rotate]]~~ in a single direction or only clockwise in said grooves or ribs (167) of the upper neck (165) of the piston (16).

9. (Currently amended) An underground sprinkler with a pop-up head according to claim 8, wherein the stop for said omega-shaped ~~[[elements]]~~ part further comprise a stainless steel wire part (29) in the form of an elongated trapezium having a central opening (290) on the major base, producing

two anchors (291-292) which are fixed in a corresponding housing (120) of the lower sector (12) of the sprinkler body (4).

10. (Currently amended) An underground sprinkler with a pop-up head according to claim 1, wherein the stainless steel shaft for assembling the sprinkler body further comprises a milled space (30) where ~~[[the]]~~ a head (113) of the sprinkler (4) body is non-detachably fixed.

11. (Currently amended) An underground sprinkler with a pop-up head according to claim 1, wherein the jet breaker further comprises a controlling screw (10) incorporating a damping spring (101) and which screws into a biased hole (115) provided on a side extension (116) of the upper sector (11) of the sprinkler body (4), directly facing ~~[[the]]~~ an outlet (110) of the spray nozzle (9).

12. (Cancelled)